

ABSTRACT OF THE DISCLOSURE

A cellulosic product such as paper coating composition is disclosed comprising
5 aqueous-based semi-crystalline vinyl acetate-ethylene polymer emulsions, containing
crystalline ethylene segments, which are useful for imparting oil, grease, solvent, water,
and moisture vapor resistance. The polymer emulsions are prepared via the direct
aqueous-based free radical emulsion polymerization of ethylene with various other
comonomers. The semi-crystalline aqueous-based polymer emulsions of this invention
10 have a crystalline melting point and a crystalline heat of fusion ranging from 5 to 100 J/g.
The semi-crystalline aqueous-based emulsion polymers of this invention can be used
directly as a paper or paperboard coating for imparting oil, grease, solvent, water, and
moisture vapor resistance. Further, the present invention provides a repulpable paper
and paperboard.